# INTERMEDIATE STATE PERMIT TO OPERATE

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to operate the air contaminant source(s) described below, in accordance with the laws, rules, and conditions set forth here in.

**Intermediate Operating Permit Number:** OP2006-059

Expiration Date: AUG 2 1 2011 Installation ID: 031-0061 Project Number: 2002-01-036

# **Installation Name and Address**

Jackson Municipal Utilities 420 Florence Street Jackson, MO 63755 Cape Girardeau County

# Parent Company's Name and Address

City of Jackson 101 Court Street Jackson, MO 63755

# **Installation Description:**

Jackson Municipal Utilities is an electric generating facility owned and operated by the City of Jackson. The primary emission sources at Jackson Municipal are twelve (12) diesel engine generators. Other sources of emissions include fuel storage, space heaters and a space-heating boiler.

AUG 2 2 2006

Effective Date

Director or Designee

Department of Natural Resources

# **Table of Contents**

I.	INSTALLATION DESCRIPTION AND EQUIPMENT LISTING	3
	INSTALLATION DESCRIPTION	
	0.36	
	EMISSION UNITS WITH LIMITATIONS	
	EMISSION UNITS WITHOUT LIMITATIONS	
	DOCUMENTS INCORPORATED BY REFERENCE	
II.	PLANT WIDE EMISSION LIMITATIONS	5
	PERMIT CONDITION PW001	5
	10 CSR 10-6.065(2)(C) and 10 CSR 10-6.065(5)(A)	5
III.	. EMISSION UNIT SPECIFIC EMISSION LIMITATIONS	6
	EU0010 - ENGINES	6
	PERMIT CONDITION (EU0001 through EU0012)-001	
	10 CSR 10-6.260	
	EU0010 through EU0012 - LARGE STATIONARY INTERNAL COMBUSTION ENGINES	
	PERMIT CONDITION (EU0010 through EU0012)-001	
	PERMIT CONDITION (EU0010 through EU0012)-002	
	10 CSR 10-6.060 Construction Permits Required  Construction Permit 082005-011, Issued August 17, 2005	
	EU0013 – SPACE HEATERS	
	PERMIT CONDITION EU0013-001	
	10 CSR 10-3.060 Maximum Allowable Emissions of Particulate Matter From Fuel Burning	
	PERMIT CONDITION EU0003-002	
	10 CSR 10-6.220	
IV.	. CORE PERMIT REQUIREMENTS	13
v.	GENERAL PERMIT REQUIREMENTS	18
VI.	ATTACHMENTS	22
	ATTACHMENT A	23
	Monthly Nitrogen Oxides Emissions Tracking Record	23
	ATTACHMENT B	
	ATTACHMENT C	
	ATTACHMENT D	
	ATTACHMENT E	
	ATTACHMENT F	
	ATTACHMENT G	30

#### **Installation Description and Equipment Listing** I.

# INSTALLATION DESCRIPTION

Jackson Municipal Utilities is an electric generating facility owned and operated by the City of Jackson. The primary emission sources at Jackson Municipal are twelve (12) diesel engine generators. Other sources of emissions include fuel storage and space heaters and a space-heating boiler.

Reported Air Pollutant Emissions, tons per year									
Year	Particulate	Sulfur	Nitrogen	Volatile	Carbon	Lead	Hazardous		
	Matter	Oxides	Oxides	Organic	Monoxide	(Pb)	Air		
	≤ Ten Microns	$(SO_x)$	$(NO_x)$	Compounds	(CO)		Pollutants		
	(PM-10)			(VOC)		_	(HAPs)		
2005	0.007	0.006	0.372	0.012	0.098	•			
2004	0.01	-	0.28	0.12	0.07	-	-		
2003	0.09	0.07	4.51	0.26	1.24	•	-		
2003	0.22	0.20	12.53	0.39	3.32	-	-		
2001	0.36	0.25	19.76	0.72	5.27	-	-		

# **EMISSION UNITS WITH LIMITATIONS**

The following list provides a description of the equipment at this installation which emits air pollutants and which is identified as having unit-specific emission limitations.

Emission Unit #	Description of Emission Unit	Emission Point #
EU0001	Engine No. 1	EP13
EU0002	Engine No. 2	EP12
EU0003	Engine No. 3	EP11
EU0004	Engine No. 4	EP10
EU0005	Engine No. 5	EP6
EU0006	Engine No. 6	EP7
EU0007	Engine No. 7	EP9
EU0008	Engine No. 8	EP8
EU0009	Engine No. 9	EP14
EU0010	Engine No. 10	EP19
EU0011	Engine No. 11	EP20
EU0012	Engine No. 12	EP21
EU0013	Space Heaters	EP17

# **EMISSION UNITS WITHOUT LIMITATIONS**

The following list provides a description of the equipment which does not have unit specific limitations at the time of permit issuance.

# Description of Emission Source

Three  $(3) - 14{,}100$  gallon fuel oil tanks

Two (2) - 12,127 gallon fuel oil tanks

One (1) - 1,000 gallon fuel oil tank

Three (3) - 336 gallon fuel oil tanks

One (1) - 302 gallon fuel oil tank

One (1) - 231 gallon fuel oil tank

Four (4) - 186 gallon fuel oil tanks

# **DOCUMENTS INCORPORATED BY REFERENCE**

These documents have been incorporated by reference into this permit.

- 1) Construction Permit Number 1182-016 to 1182-017, issued February 22, 1982
- 2) Amendment to Construction Permit Number 1182-016, issued July 15, 1983
- 3) Construction Permit Number 082005-001, issued August 17, 2005

#### II. **Plant Wide Emission Limitations**

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued.

# **PERMIT CONDITION PW001**

10 CSR 10-6.065(2)(C) and 10 CSR 10-6.065(5)(A)

Voluntary Limitation(s)

# Emission Limitation:

The permittee shall discharge into the atmosphere from the entire installation less than 100 tons of nitrogen oxides (NOx) during any consecutive 12-month period.

# Monitoring, Recordkeeping:

- 1) The permittee shall maintain an accurate record of emissions of NOx emitted into the atmosphere from this installation. The permittee shall record the monthly NOx emissions with a consecutive 12-month total. The permittee shall use Attachment A (NOx Emissions Tracking Record) or an equivalent form for this purpose.
- 2) The permittee shall maintain these records on site for the most recent 60 months.
- 3) The permittee shall immediately make such records available to any Department of Natural Resources personnel upon request.

#### Reporting:

The permittee shall report to the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the end of the month, if the consecutive 12-month total records show that the source exceeded the limitation of 100 tons of NOx emissions.

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued.

EU0010 – ENGINES							
Emission Unit	Description Description	Manufacturer/Model #	2004 EIQ Reference #				
EU0001	Engine No. 1; Maximum Hourly Design Rate (MHDR) = 10.96 MMBtu/hr (F.O. #2 and N.G.); Installed 1946	Superior – The National Supply Company, Superior Engine Division	EP13				
EU0002	Engine No. 2; Maximum Hourly Design Rate (MHDR) = 10.96 MMBtu/hr (F.O. #2 and N.G.); Installed 1946	Superior – The National Supply Company, Superior Engine Division	EP12				
EU0003	Engine No. 3; Maximum Hourly Design Rate (MHDR) = 10.96 MMBtu/hr (F.O. #2 and N.G.); Installed 1946	Busch-Sulzer Bros. – Diesel Engine Company Division, Norberg Manufacturing	EP11				
EU0004	Engine No. 4; Maximum Hourly Design Rate (MHDR) = 10.96 MMBtu/hr (F.O. #2 and N.G.); Installed 1946	Busch-Sulzer Bros. – Diesel Engine Company Division, Norberg Manufacturing	EP10				
EU0005	Engine No. 5; Maximum Hourly Design Rate (MHDR) = 6.85 MMBtu/hr (F.O. #2 and N.G.); Installed 1936	American Locomotive Company	EP6				
EU0006	Engine No. 6; Maximum Hourly Design Rate (MHDR) = 10.96 MMBtu/hr (F.O. #2 and N.G.); Installed 1946	Busch-Sulzer Bros. – Diesel Engine Company Division, Norberg Manufacturing	EP7				
EU0007	Engine No. 7; Maximum Hourly Design Rate (MHDR) = 63.02 MMBtu/hr (F.O. #2 and N.G.); Installed 1972	Worthington – CEI, Inc.	EP9				
EU0008	Engine No. 8; Maximum Hourly Design Rate (MHDR) = 63.02 MMBtu/hr (F.O. #2 and N.G.); Installed 1972	Worthington – CEI, Inc.	EP8				
EU0009	Engine No. 9; Maximum Hourly Design Rate (MHDR) = 31.51 MMBtu/hr (F.O. #2 and N.G.); Installed 1983	Fairbanks Morse Engine Division, Colt Industries	EP14				
EU0010	Engine No. 10; Maximum Hourly Design Rate (MHDR) = 19.25 MMBtu/hr (F.O. #2 and N.G.); Installed 2005	Caterpillar Model SR4B/Model 3516B TA	EP19				
EU0011	Engine No. 11; Maximum Hourly Design Rate (MHDR) = 19.25 MMBtu/hr (F.O. #2 and N.G.); Installed 2005	Caterpillar Model SR4B/Model 3516B TA	EP20				
EU0012	Engine No. 12; Maximum Hourly Design Rate (MHDR) = 19.25 MMBtu/hr (F.O. #2 and N.G.); Installed 2005	Caterpillar Model SR4B/Model 3516B TA	EP21				

# PERMIT CONDITION (EU0001 through EU0012)-001

10 CSR 10-6.260

Restriction of Emission of Sulfur Compounds

# Emission Limitation:

- 1) No person shall cause or permit emissions of sulfur dioxide into the atmosphere from any indirect heating source in excess of eight pounds of sulfur dioxide per million BTUs actual heat input averaged on any consecutive three hour time period
- 2) No person shall cause or permit the emission of sulfur compounds from any source which causes or contributes to concentrations exceeding those specified in 10 CSR 10-6.010 Ambient Air Quality Standards.
- 3) No person shall cause or permit the emission of sulfur compounds from any source which causes or contributes to concentrations exceeding those specified in 10 CSR 10-6.010 Ambient Air Quality Standards. [10 CSR 10-6,260(4) of August 30, 1996 version, 10 CSR 10-6,260(3)(B) of May 30, 2004 version & 10 CSR 10-6.010 Ambient Air Quality Standards].

Pollutant	Concentration by Volume	Remarks
	0.03 parts per million (ppm) (80 micrograms per cubic meter (μg/m³))	Annual arithmetic mean
Sulfur Dioxide (SO <sub>2</sub> )	0.14 ppm (365 μg/m³)	24-hour average not to be exceeded more than once per year
	0.5 ppm (1300 μg/m³)	3-hour average not to be exceeded more than once per year
Hydrogen Sulfide	0.05 ppm (70 μg/m³)	½-hour average not to be exceeded over 2 times per year
$(H_2S)$	0.03 ppm (42 μg/m³)	½-hour average not to be exceeded over 2 times in any 5 consecutive days
Sulfuric Acid (H <sub>2</sub> SO <sub>4</sub> )	10 μg/m³	24-hour average not to be exceeded more than once in any 90 consecutive days

# Operational Limitation/Equipment Specifications:

The emission unit shall be limited to fuel with a sulfur content of no more than 0.05% sulfur by weight. Monitoring:

- 1) The permittee shall maintain an accurate record of the sulfur content of fuel used. The installation shall maintain records of the amount of fuel burned (natural gas or fuel oil) and verify the sulfur content (see Attachments B and C). Fuel purchase receipts, analyzed samples or certifications that verify the fuel type and sulfur content will be acceptable.
- 2) If the requirements of condition 1 can not be met, then compliance to the emission limitations shall be determined by source testing. The heating value of the fuel shall be determined as specified in 10 CSR 10-6.040(2). Source testing to determine compliance shall be performed as specified in 10 CSR 10-6.030(6). The actual heat input shall be determined by multiplying the heating value of the fuel by the amount of fuel burned during the source test period.
- 3) Other methods approved by the permitting agency in advance may be used to verify compliance.

# Recordkeeping:

- 1) If monitoring option 1 is used to verify compliance, then the permittee shall maintain records on the premises of the analysis of all fuel used which shows weight percentage of sulfur in the fuel. Fuel purchase receipts, analyzed samples or certifications that verify the fuel type and sulfur content will be acceptable.
- 2) Attachments B and C contain logs including these recordkeeping requirements. These logs, or an equivalent created by the permittee, must be used to certify compliance with this requirement.
- 3) If monitoring option 2 is used to verify compliance, then the permittee shall maintain records on the premises of all source testing performed.
- 4) These records shall be made available immediately for inspection to the Department of Natural Resources' personnel upon request.
- 5) All records shall be maintained for five years.

# Reporting:

The permittee shall report to the Air Pollution Control Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of the emission limit or sulfur content limit established by 10 CSR 10-6.260, or any malfunction which causes an exceedance.

EU0010 through EU0012 – LARGE STATIONARY INTERNAL COMBUSTION ENGINES						
Emission Unit	Description	Manufacturer/Model #	2004 EIQ Reference #			
EU0010	Engine No. 10; Maximum Hourly Design Rate (MHDR) = 19.25 MMBtu/hr (F.O. #2 and N.G.); Installed 2005	Caterpillar Model SR4B/Model 3516B TA	EP19			
EU0011	Engine No. 11; Maximum Hourly Design Rate (MHDR) = 19.25 MMBtu/hr (F.O. #2 and N.G.); Installed 2005	Caterpillar Model SR4B/Model 3516B TA	EP20			
EU0012	Engine No. 12; Maximum Hourly Design Rate (MHDR) = 19.25 MMBtu/hr (F.O. #2 and N.G.); Installed 2005	Caterpillar Model SR4B/Model 3516B TA	EP21			

# PERMIT CONDITION (EU0010 through EU0012)-001

10 CSR 10-6.390

Control of NOx Emissions From Large Stationary Internal Combustion Engines

# Emission Limitations:

An owner or operator of a large stationary internal combustion engine meeting the applicability of paragraph (1)(A)2., (Begins operation after September 30 and has capacity greater than 1,300 hp), of this rule shall not operate an engine to exceed the permitted emission rate or the following emission rate, whichever is more stringent:

- 1. For rich-burn SI engines 3.0 grams per horsepower-hour; or
- 2. For lean-burn SI engines 3.0 grams per horsepower-hour

## Monitoring Requirements.

1) Any owner or operator meeting the applicability of section (1) of this rule shall not operate such equipment unless it is equipped with one of the following:

- a) A continuous emissions monitoring system (CEMS), which meets the applicable requirements of 40 CFR part 60, subpart A, Appendix B, and complies with the quality assurance procedures specified in 40 CFR part 60, Appendix F. The CEMS shall be used to demonstrate compliance with the applicable emission limit; or
- b) A calculational and recordkeeping procedure based upon actual NOx emissions testing and correlations with operating parameters. The installation, implementation and use of such an alternate calculational and recordkeeping procedure must be approved by the director and EPA and incorporated into the SIP in writing prior to implementation.
- 2) The CEMS or approved alternate monitoring procedure shall be operated and maintained in accordance with an on-site CEMS or alternate monitoring plan approved by the director.

# Excess Emissions During Start-Up, Shutdown, or Malfunction:

If the owner or operator provides notice of excess emissions pursuant to state rule 10 CSR 10-6.050(3)(B), the director will determine whether the excess emissions are attributable to start-up, shutdown or malfunction conditions, pursuant to rule 10 CSR 10-6.050(3)(C). If the director determines that the excess emissions are attributable to such conditions, and if such excess emissions cause the internal combustion engine to exceed the applicable emission limits in this rule, the director will determine whether enforcement action is warranted, as provided in rule 10 CSR 10-6.050(3)(C). If the director determines that the excess emissions are attributable to a start-up, shutdown, or malfunction condition and does not warrant enforcement action, those emissions would not be included in the calculation of ozone season NOx emissions.

# Reporting Requirements:

The owner or operator subject to this rule shall comply with the following requirements:

- 1) The owner or operator shall submit to the director the identification number and type of each unit subject to this rule, the name and address of the plant where the unit is located, and the name and telephone number of the person responsible for demonstrating compliance with this rule before May 1, 2007;
- 2) The owner or operator shall submit an annual report documenting for each controlled unit the total NOx emissions from May 1 through September 30 of each year to the director by November 1 of that year, beginning in 2007; and
- 3) The owner or operator of a unit subject to this rule and operating a CEMS shall submit an excess emissions monitoring systems performance report, in accordance with the requirements of 40 CFR 60.7(c) and 60.13.

## Recordkeeping Requirements:

Any owner or operator of a unit subject to this rule shall maintain all records necessary to demonstrate compliance with this rule for a period of five (5) years at the plant at which the subject unit is located. The records shall be made available to the director upon request. The owner or operator shall maintain records of the following information for each day of the control period the unit is operated:

- 1) The identification number of each unit and the name and address of the plant where the unit is located for each unit subject to the requirements of this rule;
- 2) The calendar date of record:
- 3) The number of hours the unit is operated during each day including start-ups, shutdowns, malfunctions, and the type and duration of maintenance and repair;
- 4) The date and results of each emissions inspection;

- 5) A summary of any emissions corrective maintenance taken;
- 6) The results of all compliance tests: and
- 7) If a unit is equipped with a CEMS
  - a) The identification of time periods during which NOx standards are exceeded, the reason for the exceedance, and action taken to correct the exceedance and to prevent similar future exceedances;
  - b) The identification of the time periods for which operating conditions and pollutant data were not obtained including reasons for not obtaining sufficient data and a description of corrective actions taken.

# PERMIT CONDITION (EU0010 through EU0012)-002

10 CSR 10-6.060 Construction Permits Required

Construction Permit 082005-011, Issued August 17, 2005

# Emission Limitations:

The permittee shall emit less than forty (40) tons of NOx from the three emission units (EU0010 through EU0012) in any consecutive 12-month period.

# Monitoring/Recordkeeping:

- 1) The permittee shall maintain an accurate record of emissions of NOx emitted into the atmosphere from these emission units. The permittee shall record the monthly NOx emissions with a consecutive 12month total. The permittee shall use Attachment A (NOx Emissions Tracking Record) or an equivalent form for this purpose.
- 2) The permittee shall maintain these records on site for the most recent 60 months.
- 3) The permittee shall immediately make such records available to any Department of Natural Resources personnel upon request.

# Reporting:

The permittee shall report to the Air Pollution Control Program, Enforcement Section, P.O. Box 176. Jefferson City, MO 65102, no later than ten days after the end of the month, if the consecutive 12-month total records show that the source exceeded the limitation of 40 tons of NOx emissions.

EU0013 – SPACE HEATERS							
Emission Unit	Description	Manufacturer/Model #	2003 EIQ Reference #				
	Space Heating Boiler; Maximum Hourly Design Rate (MHDR) = 1.15 MMBtu/hr; Installed 2001	Unknown					
EU0013	Ten (10) Natural gas fired space heater; Maximum Hourly Design Rate (MHDR) = 0.1 MMBtu/hr each (or 1.00 MMBtu/hr total); Installed 2001	Unknown	EP17				

# **PERMIT CONDITION EU0013-001**

10 CSR 10-3.060 Maximum Allowable Emissions of Particulate Matter From Fuel Burning Equipment Used for Indirect Heating

# Emission Limitation:

The permittee shall not emit particulate matter in excess of 0.42 pounds per million BTU of heat input.

## **Operation Limitation/Equipment Specifications:**

This emission unit shall be limited to burning pipeline grade natural gas.

# Monitoring/Recordkeeping:

- 1) The permittee shall maintain on the premises of the installation calculations demonstrating compliance with this rule (See Attachment D).
- 2) The calculation shall be made available immediately for inspection to the Department of Natural Resources' personnel upon request.

# Reporting:

The permittee shall report any deviations/exceedances of this permit condition using the semi-annual monitoring report and annual compliance certification to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as required by 10 CSR 10-6.065(6)(C)1.C.(III).

# PERMIT CONDITION EU0003-002

10 CSR 10-6.220

Restriction of Emission of Visible Air Contaminants

# Emission Limitation:

- 1) No owner or other person shall cause or permit emissions to be discharged into the atmosphere from any **new** source any visible emissions with an opacity greater than 20%.
- 2) Exception: A person may discharge into the atmosphere from any source of emissions for a period(s) aggregating not more than six (6) minutes in any 60 minutes air contaminants with an opacity up to 60%.

# Monitoring:

- 1) The permittee shall conduct opacity readings on this emission unit using the procedures contained in USEPA Test Method 22. At a minimum, the observer should be trained and knowledgeable about the effects on visibility of emissions caused by background contrast, ambient lighting, observer position relative to lighting, wind and the presence of uncombined water. Readings are only required when the emission unit is operating and when the weather conditions allow. If no visible or other significant emissions are observed using these procedures, then no further observations would be required. For emission units with visible emissions perceived or believed to exceed the applicable opacity standard, the source representative would then conduct a Method 9 observation.
- 2) The following monitoring schedule must be maintained:
  - a) Weekly observations shall be conducted for a minimum of eight consecutive weeks after permit issuance. Should no violation of this regulation be observed during this period then-
  - b) Observations must be made once every two (2) weeks for a period of eight weeks. If a violation is noted, monitoring reverts to weekly. Should no violation of this regulation be observed during this period then-
  - c) Observations must be made once per month. If a violation is noted, monitoring reverts to weekly.

3) If the source reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring frequency.

# Recordkeeping:

- 1) The permittee shall maintain records of all observation results (see Attachment E), noting:
  - a) Whether any air emissions (except for water vapor) were visible from the emission units,
  - b) All emission units from which visible emissions occurred, and
  - c) Whether the visible emissions were normal for the process.
- 2) The permittee shall maintain records of any equipment malfunctions (see Attachment F).
- 3) The permittee shall maintain records of any Method 9 test performed in accordance with this permit condition (see Attachment G).
- 4) Attachments E, F and G contain logs including these recordkeeping requirements. These logs, or an equivalent created by the permittee, must be used to certify compliance with this requirement.
- 5) These records shall be made available immediately for inspection to Department of Natural Resources personnel upon request.
- 6) All records shall be maintained for five years.

# Reporting:

- 1) The permittee shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the permittee determined using the Method 9 test that the emission unit(s) exceeded the opacity limit.
- 2) Reports of any deviations from monitoring, recordkeeping and reporting requirements of this permit condition shall be submitted semiannually, in the semi-annual monitoring report and annual compliance certification, as required by Section IV of this permit.

#### **Core Permit Requirements** IV.

The installation shall comply with each of the following requirements. Consult the appropriate sections in the Code of Federal Regulations (CFR), Code of State Regulations (CSR), and local ordinances for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued.

# 10 CSR 10-6.050 Start-up, Shutdown and Malfunction Conditions

- 1) In the event of a malfunction, which results in excess emissions that exceed one hour, the permittee shall submit to the director within two business days, in writing, the following information:
  - a) Name and location of installation;
  - b) Name and telephone number of person responsible for the installation;
  - c) Name of the person who first discovered the malfunction and precise time and date that the malfunction was discovered.
  - d) Identity of the equipment causing the excess emissions;
  - e) Time and duration of the period of excess emissions;
  - f) Cause of the excess emissions;
  - g) Air pollutants involved;
  - h) Best estimate of the magnitude of the excess emissions expressed in the units of the applicable requirement and the operating data and calculations used in estimating the magnitude;
  - i) Measures taken to mitigate the extent and duration of the excess emissions; and
  - j) Measures taken to remedy the situation that caused the excess emissions and the measures taken or planned to prevent the recurrence of these situations.
- 2) The permittee shall submit the paragraph 1 information list to the director in writing at least ten days prior to any maintenance, start-up or shutdown, which is expected to cause an excessive release of emissions that exceed one hour. If notice of the event cannot be given ten days prior to the planned occurrence, it shall be given as soon as practicable prior to the release. If an unplanned excess release of emissions exceeding one hour occurs during maintenance, start-up or shutdown, the director shall be notified verbally as soon as practical during normal working hours and no later than the close of business of the following working day. A written notice shall follow within ten working days.
- 3) Upon receipt of a notice of excess emissions issued by an agency holding a certificate of authority under section 643.140, RSMo, the permittee may provide information showing that the excess emissions were the consequence of a malfunction, start-up or shutdown. The information, at a minimum, should be the paragraph 1 list and shall be submitted not later than 15 days after receipt of the notice of excess emissions. Based upon information submitted by the permittee or any other pertinent information available, the director or the commission shall make a determination whether the excess emissions constitute a malfunction, start-up or shutdown and whether the nature, extent and duration of the excess emissions warrant enforcement action under section 643.080 or 643.151, RSMo.
- 4) Nothing in this rule shall be construed to limit the authority of the director or commission to take appropriate action, under sections 643.080, 643.090 and 643.151, RSMo to enforce the provisions of the Air Conservation Law and the corresponding rule.
- 5) Compliance with this rule does not automatically absolve the permittee of liability for the excess emissions reported.

# 10 CSR 10-6.060 Construction Permits Required

The permittee shall not commence construction, modification, or major modification of any installation subject to this rule, begin operation after that construction, modification, or major modification, or begin operation of any installation which has been shut down longer than five years without first obtaining a permit from the permitting authority.

# 10 CSR 10-6.065 Operating Permits

The permittee shall file a complete application for renewal of this operating permit at least six months before the date of permit expiration. In no event shall this time be greater than eighteen months. [10 CSR 10-6.065(5)(B)1.A(III)] The permittee shall retain the most current operating permit issued to this installation on-site. [10 CSR 10-6.065, §(5)(C)(1) and §(6)(C)1.C(II)] The permittee shall immediately make such permit available to any Missouri Department of Natural Resources personnel upon request. [10 CSR 10-6.065,  $\S(5)(C)(1)$  and  $\S(6)(C)3.B$ 

# 10 CSR 10-6.110 Submission of Emission Data, Emission Fees and Process Information

- The permittee shall complete and submit an Emission Inventory Questionnaire (EIQ) in accordance with the requirements outlined in this rule.
- 2) The permittee shall pay an annual emission fee per ton of regulated air pollutant emitted according to the schedule in the rule. This fee is an emission fee assessed under authority of RSMo. 643.079.
- 3) The fees shall be due April 1 each year for emissions produced during the previous calendar year. The fees shall be payable to the Department of Natural Resources and shall be accompanied by the Emissions Inventory Questionnaire (EIQ) form or equivalent approved by the director.

# 10 CSR 10-6.130 Controlling Emissions During Episodes of High Air Pollution Potential

This rule specifies the conditions that establish an air pollution alert (yellow/orange/red/purple), or emergency (maroon) and the associated procedures and emission reduction objectives for dealing with each. The permittee shall submit an appropriate emergency plan if required by the Director.

# 10 CSR 10-6.150 Circumvention

The permittee shall not cause or permit the installation or use of any device or any other means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission or air contaminant which violates a rule of the Missouri Air Conservation Commission.

# 10 CSR 10-6.170 Restriction of Particulate Matter to the Ambient Air Beyond the Premises of **Origin**

- 1) The permittee shall not cause or allow to occur any handling, transporting or storing of any material; construction, repair, cleaning or demolition of a building or its appurtenances; construction or use of a road, driveway or open area; or operation of a commercial or industrial installation without applying reasonable measures as may be required to prevent, or in a manner which allows or may allow, fugitive particulate matter emissions to go beyond the premises of origin in quantities that the particulate matter may be found on surfaces beyond the property line of origin. The nature or origin of the particulate matter shall be determined to a reasonable degree of certainty by a technique proven to be accurate and approved by the director.
- 2) The permittee shall not cause nor allow to occur any fugitive particulate matter emissions to remain visible in the ambient air beyond the property line of origin.

- 3) Should it be determined that noncompliance has occurred, the director may require reasonable control measures as may be necessary. These measures may include, but are not limited to, the following:
  - a) Revision of procedures involving construction, repair, cleaning and demolition of buildings and their appurtenances that produce particulate matter emissions;
  - b) Paving or frequent cleaning of roads, driveways and parking lots;
  - c) Application of dust-free surfaces;
  - d) Application of water; and
  - e) Planting and maintenance of vegetative ground cover.

# 10 CSR 10-6.180 Measurement of Emissions of Air Contaminants

- 1) The director may require any person responsible for the source of emission of air contaminants to make or have made tests to determine the quantity or nature, or both, of emission of air contaminants from the source. The director may specify testing methods to be used in accordance with good professional practice. The director may observe the testing. All tests shall be performed by qualified personnel.
- 2) The director may conduct tests of emissions of air contaminants from any source. Upon request of the director, the person responsible for the source to be tested shall provide necessary ports in stacks or ducts and other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices as may be necessary for proper determination of the emission of air contaminants.
- 3) The director shall be given a copy of the test results in writing and signed by the person responsible for the tests.

# 10 CSR 10-3.030 Open Burning Restrictions

- The permittee shall not conduct, cause, permit or allow a salvage operation, the disposal of trade wastes or burning of refuse by open burning.
- 2) Exception Open burning of trade waste or vegetation may be permitted only when it can be shown that open burning is the only feasible method of disposal or an emergency exists which requires open burning.
- 3) Any person intending to engage in open burning shall file a request to do so with the director. The request shall include the following:
  - a) The name, address and telephone number of the person submitting the application; The type of business or activity involved; A description of the proposed equipment and operating practices, the type, quantity and composition of trade wastes and expected composition and amount of air contaminants to be released to the atmosphere where known;
  - b) The schedule of burning operations;
  - c) The exact location where open burning will be used to dispose of the trade wastes;
  - d) Reasons why no method other than open burning is feasible; and
  - e) Evidence that the proposed open burning has been approved by the fire control authority which has jurisdiction.
- 4) Upon approval of the open burning permit application by the director, the person may proceed with the operation under the terms of the open burning permit. Be aware that such approval shall not exempt Enter Installation Name here from the provisions of any other law, ordinance or regulation.
- 5) The permittee shall maintain files with letters from the director approving the open burning operation and previous DNR inspection reports.

# 10 CSR 10-3.090 Restriction of Emission of Odors

No person may cause, permit or allow the emission of odorous matter in concentrations and frequencies or for durations that odor can be perceived when one volume of odorous air is diluted with seven volumes of odor-free air for two separate trials not less than 15 minutes apart within the period of one hour.

This requirement is not federally enforceable.

# Title VI – 40 CFR Part 82 Protection of Stratospheric Ozone

- 1) The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
  - a) All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to §82.106.
  - b) The placement of the required warning statement must comply with the requirements pursuant to §82.108.
  - c) The form of the label bearing the required warning statement must comply with the requirements pursuant to §82.110.
  - d) No person may modify, remove, or interfere with the required warning statement except as described in §82.112.
- 2) The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Subpart B:
  - a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
  - b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.
  - c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
  - d) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with recordkeeping requirements pursuant to §82.166. ("MVAC-like" appliance as defined at §82.152).
  - e) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.156.
  - f) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.
- 3) If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
- 4) If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo. or system used on passenger buses using HCFC-22 refrigerant.

The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. Federal Only - 40 CFR part 82

# 10 CSR 10-6.280 Compliance Monitoring Usage

- 1) The permittee is not prohibited from using the following in addition to any specified compliance methods for the purpose of submission of compliance certificates:
  - a) Monitoring methods outlined in 40 CFR Part 64;
  - b) Monitoring method(s) approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; and
  - c) Any other monitoring methods approved by the director.
- 2) Any credible evidence may be used for the purpose of establishing whether a permittee has violated or is in violation of any such plan or other applicable requirement. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred by a permittee:
  - a) Monitoring methods outlined in 40 CFR Part 64;
  - b) A monitoring method approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; and
  - c) Compliance test methods specified in the rule cited as the authority for the emission limitations.
- 3) The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:
  - a) Applicable monitoring or testing methods, cited in:
    - i) 10 CSR 10-6.030, "Sampling Methods for Air Pollution Sources";
    - ii) 10 CSR 10-6.040, "Reference Methods";
    - iii) 10 CSR 10-6.070, "New Source Performance Standards";
    - iv) 10 CSR 10-6.080, "Emission Standards for Hazardous Air Pollutants"; or
  - b) Other testing, monitoring, or information gathering methods, if approved by the director, that produce information comparable to that produced by any method listed above.

#### V. **General Permit Requirements**

The installation shall comply with each of the following requirements. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued.

# 10 CSR 10-6.065, §(5)(C)1 and §(6)(C)1.B Permit Duration

This permit is issued for a term of five years, commencing on the date of issuance. This permit will expire at the end of this period unless renewed.

# 10 CSR 10-6.065, §(5)(C)1 and §(6)(C)1.C General Recordkeeping and Reporting Requirements

- 1) Recordkeeping
  - a) All required monitoring data and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report or application.
  - b) Copies of all current operating and construction permits issued to this installation shall be kept onsite for as long as the permits are in effect. Copies of these permits shall be made immediately available to any Missouri Department of Natural Resources' personnel upon request.
- 2) Reporting
  - a) All reports shall be submitted to the Air Pollution Control Program, Enforcement Section, P. O. Box 176, Jefferson City, MO 65102.
  - b) The permittee shall submit a report of all required monitoring by:
    - i) April 1st for monitoring which covers the January through December time period.
    - ii) Exception. Monitoring requirements which require reporting more frequently than annually shall report no later than 30 days after the end of the calendar quarter in which the measurements were taken.
  - c) Each report shall identify any deviations from emission limitations, monitoring, recordkeeping. reporting, or any other requirements of the permit.
  - d) Submit supplemental reports as required or as needed. Supplemental reports are required no later than ten days after any exceedance of any applicable rule, regulation or other restriction. All reports of deviations shall identify the cause or probable cause of the deviations and any corrective actions or preventative measures taken.
    - i) Notice of any deviation resulting from an emergency (or upset) condition as defined in paragraph (6)(C)7 of 10 CSR 10-6.065 (Emergency Provisions) shall be submitted to the permitting authority either verbally or in writing within two working days after the date on which the emission limitation is exceeded due to the emergency, if the permittee wishes to assert an affirmative defense. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that indicate an emergency occurred and the permittee can identify the cause(s) of the emergency. The permitted installation must show that it was operated properly at the time and that during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or requirements in the permit. The notice must contain a description of the emergency, the steps taken to mitigate emissions, and the corrective actions taken.

- ii) Any deviation that poses an imminent and substantial danger to public health, safety or the environment shall be reported as soon as practicable.
- iii) Any other deviations identified in the permit as requiring more frequent reporting than the permittee's annual report shall be reported on the schedule specified in this permit, and no later than ten days after any exceedance of any applicable rule, regulation, or other restriction.
- e) Every report submitted shall be certified by the responsible official, except that, if a report of a deviation must be submitted within ten days after the deviation, the report may be submitted without a certification if the report is resubmitted with an appropriate certification within ten days after that, together with any corrected or supplemental information required concerning the deviation.
- f) The permittee may request confidential treatment of information submitted in any report of deviation.

# 10 CSR 10-6.065 §(5)(C)1 and §(6)(C)1.D Risk Management Plan Under Section 112(r)

The permittee shall comply with the requirements of 40 CFR Part 68, Accidental Release Prevention Requirements. If the permittee has more than a threshold quantity of a regulated substance in process, as determined by 40 CFR Section 68.115, the permittee shall submit a Risk Management Plan in accordance with 40 CFR Part 68 no later than the latest of the following dates:

- 1) June 21, 1999;
- 2) Three years after the date on which a regulated substance is first listed under 40 CFR Section 68.130;
- 3) The date on which a regulated substance is first present above a threshold quantity in a process.

# 10 CSR 10-6.065(5)(C)1.A General Requirements

- 1) The permittee must comply with all of the terms and conditions of this permit. Any noncompliance with a permit condition constitutes a violation and is grounds for enforcement action, permit termination, permit revocation and re-issuance, permit modification or denial of a permit renewal application.
- 2) The permittee may not use as a defense in an enforcement action that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit
- 3) The permit may be modified, revoked, reopened, reissued or terminated for cause. Except as provided for minor permit modifications, the filing of an application or request for a permit modification, revocation and reissuance, or termination, or the filing of a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- 4) This permit does not convey any property rights of any sort, nor grant any exclusive privilege.
- 5) The permittee shall furnish to the Air Pollution Control Program, upon receipt of a written request and within a reasonable time, any information that the Air Pollution Control Program reasonably may require to determine whether cause exists for modifying, reopening, reissuing or revoking the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the Air Pollution Control Program copies of records required to be kept by the permittee. The permittee may make a claim of confidentiality for any information or records submitted under this rule.
- 6) Failure to comply with the limitations and conditions that qualify the installation for an Intermediate permit make the installation subject to the provisions of 10 CSR 10-6.065(6) and enforcement action for operating without a valid part 70 operating permit.

# 10 CSR 10-6.065(5)(C)1.C Reasonably Anticipated Operating Scenarios

None

# 10 CSR 10-6.065, $\S(5)(B)4$ ; $\S(5)(C)1$ , $\S(6)(C)3.B$ ; and $\S(6)(C)3.D$ ; and $\S(5)(C)3$ and $\S(6)(C)3.E.(I)$ - (III) and (V) - (VI) Compliance Requirements

- 1) Any document (including reports) required to be submitted under this permit shall contain a certification signed by the responsible official.
- 2) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized officials of the Missouri Department of Natural Resources, or their authorized agents. to perform the following (subject to the installation's right to seek confidential treatment of information submitted to, or obtained by, the Air Pollution Control Program):
  - a) Enter upon the premises where a permitted installation is located or an emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
  - b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
  - c) Inspect, at reasonable times and using reasonable safety practices, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
  - d) As authorized by the Missouri Air Conservation Law, Chapter 643, RSMo or the Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the terms of this permit, and all applicable requirements as outlined in this permit.
- 3) All progress reports required under an applicable schedule of compliance shall be submitted semiannually (or more frequently if specified in the applicable requirement). These progress reports shall contain the following:
  - a) Dates for achieving the activities, milestones or compliance required in the schedule of compliance. and dates when these activities, milestones or compliance were achieved, and
  - b) An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measures adopted.
- 4) The permittee shall submit an annual certification that it is in compliance with all of the federally enforceable terms and conditions contained in this permit, including emissions limitations, standards, or work practices. These certifications shall be submitted annually by April 1st, unless the applicable requirement specifies more frequent submission. These certifications shall be submitted to the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102. All deviations and exceedances must be included in the compliance certifications. The compliance certification shall include the following:
  - a) The identification of each term or condition of the permit that is the basis of the certification;
  - b) The current compliance status, as shown by monitoring data and other information reasonably available to the installation;
  - c) Whether compliance was continuous or intermittent;
  - d) The method(s) used for determining the compliance status of the installation, both currently and over the reporting period; and
  - e) Such other facts as the Air Pollution Control Program will require in order to determine the compliance status of this installation.

# 10 CSR 10-6.065, §(5)(C)1 and §(6)(C)7 Emergency Provisions

- An emergency or upset as defined in 10 CSR 10-6.065(6)(C)7.A shall constitute an affirmative defense to an enforcement action brought for noncompliance with technology-based emissions limitations. To establish an emergency- or upset-based defense, the permittee must demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence, the following:
  - a) That an emergency or upset occurred and that the permittee can identify the source of the emergency or upset,
  - b) That the installation was being operated properly.
  - c) That the permittee took all reasonable steps to minimize emissions that exceeded technology-based emissions limitations or requirements in this permit, and
  - d) That the permittee submitted notice of the emergency to the Air Pollution Control Program within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken.
- 2) Be aware that an emergency or upset shall not include noncompliance caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

# 10 CSR 10-6.065(5)(C)5 Off-Permit Changes

- 1) Except as noted below, the permittee may make any change in its permitted installation's operations, activities or emissions that is not addressed in, constrained by or prohibited by this permit without obtaining a permit revision. Off-permit changes shall be subject to the following requirements and restrictions:
  - a) The change must meet all applicable requirements of the Act and may not violate any existing permit term or condition; the permittee may not change a permitted installation without a permit revision if this change is a Title I modification; Please Note: Changes at the installation which affect the emission limitation(s) classifying the installation as an intermediate source (add additional equipment to the recordkeeping requirements, increase the emissions above major source level) do not qualify for off-permit changes.
  - b) The permittee must provide written notice of the change to the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 901 North 5th Street, Kansas City, Kansas 66101, no later than the next annual emissions report. This written notice shall describe each change, including the date, any change in emissions, pollutants emitted and any applicable requirement that would apply as a result of the change; and
  - c) The permittee shall keep a record describing all changes made at the installation that result in emissions of a regulated air pollutant subject to an applicable requirement and the emissions resulting from these changes.

# 10 CSR 10-6.020(2)(R)12 Responsible Official

The application utilized in the preparation of this permit was signed by James D. Roach, City Administrator. If this person terminates employment, or is reassigned different duties such that a different person becomes the responsible person to represent and bind the installation in environmental permitting affairs, the owner or operator of this air contaminant source shall notify the Director of the Air Pollution Control Program of the change. Said notification shall be in writing and shall be submitted within 30 days of the change. The notification shall include the name and title of the new person assigned by the source owner or operator to represent and bind the installation in environmental permitting affairs. All

representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of limiting permit conditions on this permit will continue to be binding on the installation until such time that a revision to this permit is obtained that would change said representations, agreements and covenants.

# 10 CSR 10-6.065 §(5)(E)4 and §(6)(E)6.A(III)(a)-(c) Reopening-Permit for Cause

This permit may be reopened for cause if:

- 1) The Missouri Department of Natural Resources (MDNR) or EPA determines that the permit contains a material mistake or that inaccurate statements were made which resulted in establishing the emissions limitation standards or other terms of the permit,
- 2) Additional applicable requirements under the Act become applicable to the installation; however, reopening on this ground is not required if—:
  - a) The permit has a remaining term of less than three years;
  - b) The effective date of the requirement is later than the date on which the permit is due to expire; or
  - c) The additional applicable requirements are implemented in a general permit that is applicable to the installation and the installation receives authorization for coverage under that general permit.
- 3) MDNR or EPA determines that the permit must be reopened and revised to assure compliance with applicable requirements.

# 10 CSR 10-6.065 §(5)(E)1.A and §(6)(E)1.C Statement of Basis

This permit is accompanied by a statement setting forth the legal and factual basis for the draft permit conditions (including references to applicable statutory or regulatory provisions). This Statement of Basis. while referenced by the permit, is not an actual part of the permit.

#### VI. **Attachments**

Attachments follow.

# ATTACHMENT A Monthly Nitrogen Oxides Emissions Tracking Record

Month, Year	(a) Energy Production of EU0001 through EU0012 (kW-hr)	(b) Amount of Diesel Fuel Burned in EU0009 through EU0012 (Mgal)	(c) Conversi on Factor*	(d) NOx Emission Factor (lb/Mgal)	(e) NOx Emissions of EU0001 through EU00012 (tons) [a x c]	(f) NOx Emissions of EU0009 through EU0012 (tons) [b x d/2000]	(g) Rolling 12- month total NOx Emissions of EU0001 through EU0012 (tons)***	(h) Rolling 12- month total NOx Emissions of EU0009 through EU0012 (tons)***
			0.00016	268.7	• •			
	,		0.00016	268.7				
			0.00016	268.7				
			0.00016	268.7				
			0.00016	268.7				
			0.00016	268.7				
			0.00016	268.7	3			
			0.00016	268.7	:			
			0.00016	268.7				
			0.00016	268.7				
			0.00016	268.7				
			0.00016	268.7				

<sup>\*</sup>To convert kW-hr to tons of NOx, multiply to 0.000016 (kW-hr x 1.341 hp-hr/kW-hr x 0.024 lb NOx/hphr / 2000 lb)

<sup>\*\*</sup>Column (g) is the sum of the last twelve (12) months of Column (e). NOTE: A 12-month total NOx emission less than 100.0 tons for Column (g) indicates compliance.

<sup>\*\*\*</sup> Column (h) is the sum of the last twelve (12) months of Column (f). NOTE: A 12-month total NOx emission less than 40.0 tons for Column (g) indicates compliance.

# ATTACHMENT B

This attachment or an equivalent may be used for the recordkeeping requirements of Permit Conditions EU0001 through EU0012 - 001.

For Month of \_\_\_\_\_Year\_\_\_\_

				Fuel	Usage			
Date	Nat. Gas	Fuel Oil		Nat. Gas	Fuel Oil	Date	Nat. Gas	Fuel Oil
	(mmscf)	(1000 gal)	Daic	(mmscf)	(1000 gal)	Date	(mmscf)	(1000 gal)
1			11		-	21		
2			12			22		
3			13			23		
4			14			24		
5			15			25		
6			16			26		
7			17			27		
8			18			28		
9			19			29		
10			20			30		
						31		

For Month of	Year
--------------	------

				Fuel	Usage			
Date	Nat. Gas	Fuel Oil (1000 gal)	Date	Nat. Gas	Fuel Oil	Date	Nat. Gas	Fuel Oil
	(mmscf)	(1000 gal)	Date	(mmscf)	Fuel Oil (1000 gal)	Date	(mmscf)	Fuel Oil (1000 gal)
1			11			21		
2			12			22		
3	,		13			23		
4			14			24		
5			15			25		
6			16			26		
7			17			27		
8			18			28		
9			19			29		
10			20			30		
						31		

# ATTACHMENT C

This attachment or an equivalent may be used for the recordkeeping requirements of Permit Conditions (EU0001 through EU0012) - 001.

Sulfur content of fuel oil (based on fuel supplier certification):	% Sulfur
Sulfur content of natural gas (based on fuel supplier certification):	% Sulfur
For Month ofYear	

	Natural gas Usage	Fuel Usage For	Emission Fact	tors (lb/MMBtu)	Monthly Emissions
Emission Unit	for Month (scf)	Month (gal)	F.O. #2	N.G.	(tons)
EU0001			0.29	5.88 x 10 <sup>-4</sup>	<u> </u>
EU0002			0.29	5.88 x 10 <sup>-4</sup>	
EU0003			0.29	5.88 x 10 <sup>-4</sup>	
EU0004			0.29	5.88 x 10 <sup>-4</sup>	
EU0005			0.29	5.88 x 10 <sup>-4</sup>	
EU0006			0.29	5.88 x 10 <sup>-4</sup>	
EU0007			0.29	5,88 x 10 <sup>4</sup>	
EU0008			0.29	5.88 x 10 <sup>-4</sup>	
EU0009			0.29	5.88 x 10 <sup>-4</sup>	
EU0010			0.29	5.88 x 10 <sup>-4</sup>	
EU0011			0.29	5.88 x 10 <sup>-4</sup>	
EU0012			0.29	5.88 x 10 4	

To Calculate Monthly Emissions (tons):

Diesel Usage (gal) \* Density Diesel (lb/gal) / Diesel Heating Value (Btu/lb) / 1,000,000 \* Emission Factor / 2000 Natural Gas Usage (scf) \* NG Heating Value (Btu/scf) / 1,000,000 \* Emission Factor / 2000

# Rolling 12-month emission total

Date	Emissions (tons)					
(month/year)	SOx	NOx				
12-Month Total						

# ATTACHMENT D

This attachment may be used to demonstrate compliance with 10 CSR 10-3.060, Maximum Allowable Emission of Particulate Matter from Fuel Burning Equipment Used for Indirect Heating

Emission Limit for EU0013 (new, i.e. installed after 4/3/1971):

$$E = 1.31(Q)^{-0.338} = 1.31(1.15)^{-.338} = 1.25 \text{ lb/MMBtu}$$

where Q is the total heat input of all indirect heating sources at the installation.

The following equipment was used to obtain the total heat input (O) for the above equation:

Equipment	Heat Input (mmBtu/hr)
EU0013 - Ten (10) Natural Gas Fired Space Heaters	1.0
EU0013 – Space Heating Boiler	1.15
TOTAL	2.15

The following table demonstrates compliance with the emission limit: Emission Rate (lb/mmBtu) = MHDR\*Emission Factor/Heat Capacity (mmBtu/hr)

Emission Unit #	Heat Capacity (mmBTU/hr)	PM Emission Factor	Emission Factor Reference	Potential Emission Rate	Emission Rate Limit
EU0013 (F.O. #2)	2.15	0.014 lb/MMBtu	AP-42 Table 1.3-1	0.03 (lb/mmBtu)	1.25 (lb/mmBtu)

<sup>&</sup>lt;sup>1</sup> Emission Factor from AP-42 Table 1.3-1 is 2 lb/1000 gal. It was then converted to 0.014 lb/MMBtu.

<sup>&</sup>lt;sup>1</sup> To convert to lb/MMBtu of No. 2 oil, divide by 140 MMBtu/10<sup>3</sup> gal.

# ATTACHMENT E

This attachment may be used to help meet the recordkeeping requirements of Permit Conditions: (EU0014 and EU0015)-002 and (EU0016 and EU0017)-002.

Method 22 Opacity Emission Observations								
Date	Method 22 Test Observer	Visible Emissions (yes/no)	If Visible emissions, was a method 9 done? (yes/no)					
		226. 7 24. 17 25 26 27 37 1 (1982) 1 3 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	() ()					
			·					
	diameter and the second							

# ATTACHMENT F

This attachment may be used to help meet the recordkeeping requirements of Permit Conditions: (EU0014 and EU0015)-002 and (EU0016 and EU0017)-002.

Inspection/Maintenance/Repair/Malfunction Log							
Date	Emission Unit/Equipment	Activities Performed					
	_						

# ATTACHMENT G

This attachment may be used to help meet the recordkeeping requirements of Permit Conditions: (EU0014 and EU0015)-002 and (EU0016 and EU0017)-002.

				Meth	od 9 O	pacity E	missions	Obser	vations		
Company					Observer						
Locatio	n						Observe	r Certif	ication D	ate	
Date							Emission	n Unit			
Time							Control I	Device			
			Sec	onds		Steam	Plume (ch	eck if a	mnlicable	Ŋ	
Hour	Minute	0	15	30	45	Att	ached	De	tached	1	Comments
	0										
	1										
	2										
	3										
	4							ļ		<u> </u>	
	5										
	6										
	7									-	
	8										
	9							1	·	<del> </del>	
	10							-			
	11										
	12									-	
	13										
	14	_								<del></del>	
	15 16	_				_				-	
	17									<del> </del>	
	18										
	10				<u> </u>			1		<u> </u>	
				SU	MMAR	Y OF A	/ERAGE	OPACI	TY		
-	. NT 1			4 10	Time					Opa	acity
Se	t Number		St	art		E	nd		Sum		Average
						,					
Reading	s ranged fro	om		to _		of evalua	% opacity.	•			

# STATEMENT OF BASIS

# **Voluntary Limitations**

In order to qualify for this Intermediate State Operating Permit, the permittee has accepted voluntary, federally enforceable emission limitations. Per 10 CSR 10-6.065(5)(C)1.A.(VI), if these limitations are exceeded, the installation immediately becomes subject to 10 CSR 10-6.065(6) and enforcement action for operating without a valid part 70 operating permit. It is the permittee's responsibility to monitor emission levels and apply for a part 70 operating permit far enough in advance to avoid this situation. This may mean applying more than eighteen months in advance of the exceedance, since it can take that long or longer to obtain a part 70 operating permit.

# **Permit Reference Documents**

These documents were relied upon in the preparation of the operating permit. Because they are not incorporated by reference, they are not an official part of the operating permit.

- 1) Intermediate Operating Permit Application, received January 9, 2002;
- 2) 2004 Emissions Inventory Questionnaire, received April 4, 2005; and
- 3) U.S. EPA document AP-42, Compilation of Air Pollutant Emission Factors; Volume I, Stationary Point and Area Sources, Fifth Edition.

# Applicable Requirements Included in the Operating Permit but Not in the Application or Previous **Operating Permits**

In the operating permit application, the installation indicated they were not subject to the following regulation(s). However, in the review of the application, the agency has determined that the installation is subject to the following regulation(s) for the reasons stated.

The permittee specified that the facility's ten (10) space heaters and one (1) space heating boiler were exempt units since they are combustion equipment rated less than 10 MMBtu/hr and are natural gas fired. However, since this facility is an intermediate installation, these units cannot be exempt per 10 CSR 10-6.065, Operating Permits. In addition, the units cannot be insignificant if they are subject to an applicable regulation or standard. In this case, even space heaters are subject to 10 CSR 10-3.060, Maximum Allowable Emissions of Particulate Matter From Fuel Burning Equipment Used for Indirect Heating since the rule does not specifically exempt any indirect heating source of any size unless the unit is subject to 40 CFR Part 60.

# Other Air Regulations Determined Not to Apply to the Operating Permit

The Air Pollution Control Program (APCP) has determined that the following requirements are not applicable to this installation at this time for the reasons stated.

10 CSR 10-6.100, Alternate Emission Limits

This rule is not applicable because the installation is in an ozone attainment area.

10 CSR 10-6.350, Emission Limitations and Emissions Trading of Oxides of Nitrogen This rule does not apply since there are no electrical generating units at this facility with a nameplate capacity of greater than twenty-five megawatts (25MW).

10 CSR 10-6.360, Control of NOx Emissions From Electric Generating Units and Non-Electric Generating Boilers

This rule does not apply since there are no electrical generating units at this facility with a nameplate capacity of greater than twenty-five megawatts (25MW).

10 CSR 10-6.390, Control of NOx Emissions From Large Stationary Internal Combustion Engines This rule does not apply to EU0001 through EU0012. For this rule to apply, any unit operated before September 30, 1997 should emit on an annual average more than 1 ton of NOx per day, which is equivalent to 365 tons of NOx per year in years 1995, 1996 and 1997.

The annual NOx emissions were as follows:

1995	46.55 ton/yr
1996	6.99 ton/yr
1997	8.71 ton/yr

## **Construction Permit Revisions**

None

## New Source Performance Standards (NSPS) Applicability

40 CFR Part 60 Subpart Kb Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984

This rule does not apply to storage vessels with a capacity greater than or equal to 151 m<sup>3</sup> storing a liquid with a maximum true vapor pressure less than 3.5 kilopascals (kPa). The permittee stores only #2 fuel oil in the tanks at this installation.

# Maximum Available Control Technology (MACT) Applicability None

# National Emission Standards for Hazardous Air Pollutants (NESHAP) Applicability

In the permit application and according to APCP records, there was no indication that any Missouri Air Conservation Law, Asbestos Abatement, 643.225 through 643.250; 10 CSR 10-6.080, Emission Standards for Hazardous Air Pollutants, Subpart M, National Standards for Asbestos; and 10 CSR 10-6.250, Asbestos Abatement Projects - Certification, Accreditation, and Business Exemption Requirements apply to this installation. The installation is subject to these regulations if they undertake any projects that deal with or involve any asbestos containing materials. None of the installation's operating projects underway at the time of this review deal with or involve asbestos containing material. Therefore, the above regulations were not cited in the operating permit. If the installation should undertake any construction or demolition projects in the future that deal with or involve any asbestos containing materials, the installation must follow all of the applicable requirements of the above rules related to that specific project.

# Other Regulatory Determinations

- 1) Although emission points EU0001 through EU0012 were issued Construction Permit Numbers 1182-016 to 1182-017, there were no special conditions in the permits and therefore they were not included in this operating permit.
- 2) The permittee has proposed periodic opacity monitoring as a plant-wide requirement. It was determined that 10 CSR 10-6.220, Restriction of Emission of Visible Air Contaminants only applies to emission unit group EU0013 (Space Heaters). The periodic opacity monitoring schedule of this rule has not been changed for these units as proposed.

# Other Regulations Not Cited in the Operating Permit or the Above Statement of Basis

Any regulation which is not specifically listed in either the Operating Permit or in the above Statement of Basis does not appear, based on this review, to be an applicable requirement for this installation for one or more of the following reasons.

- 1) The specific pollutant regulated by that rule is not emitted by the installation.
- 2) The installation is not in the source category regulated by that rule.
- 3) The installation is not in the county or specific area that is regulated under the authority of that rule.
- 4) The installation does not contain the type of emission unit which is regulated by that rule.
- 5) The rule is only for administrative purposes.

Should a later determination conclude that the installation is subject to one or more of the regulations cited in this Statement of Basis or other regulations which were not cited, the installation shall determine and demonstrate, to the Air Pollution Control Program's satisfaction, the installation's compliance with that regulation(s). If the installation is not in compliance with a regulation which was not previously cited, the installation shall submit to the APCP a schedule for achieving compliance for that regulation(s).

Prepared by:

Slawomit Szydlo Environmental Engineer